Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- (Currently Amended) A method for producing transgenic seed on transforming a dicot plant comprising the steps of:
 - (a) contacting a meristematic tissue of the <u>dicot</u> plant with a medium comprising DNA; comprising a transgene and a plasmid vector having T-DNA border sequences;
 - (b) contacting an area of the <u>dicot</u> plant below the meristematic tissue of step (a) with a positive lead of a power source;
 - (c) contacting the medium comprising DNA with a negative lead of the power source; and
 - (d) applying a low amperage current from the power source, thereby causing the DNA to migrate from the medium to the cells of the meristematic tissue of the dicot plant; and.
 - (e) pollinating the transformed plant.
- 2. (Cancelled).
- 3. (Currently Amended) The method of claim 12, wherein the plant is a soybean plant.
- 4. (Cancelled).
- 5. (Original) The method of claim 1, wherein the plant is a seedling.
- 6. (Currently Amended) The method of claim 1, wherein the DNA is a plasmid vector is pGA643.
- 7. (Original) The method of claim 6, wherein the plasmid vector is linearized.
- 8. (Currently Amended) The method of claim 6, wherein the plasmid vector contains a gene for barley oxalic acid oxidase.
- 9. (Original) The method of claim 1, wherein the current is about 0.01 to about 1.0 mA.
- 10. (Original) The method of claim 1, wherein the current is about 0.1 to about 0.5 mA.

- 11. (Original) The method of claim 1, wherein the meristematic tissue is an apical meristem.
- 12. (Original) The method of claim 1, wherein the meristematic tissue is a lateral meristem.
- 13. (Original) The method of claim 1, wherein the meristematic tissue is a meristematic dome.
- 14. (Original) The method of claim 1, wherein the area of the plant below the meristematic tissue is a root.
- 15. (Original) The method of claim 1, wherein the area of the plant below the meristematic tissue is a stem.
- 16. (Original) A transgenic plant produced by the method of claim 1.
- 17. (Cancelled).
- 18. (Cancelled).
- 19. (Cancelled).
- 20. (New) A transgenic plant produced by the method of claim 8.
- 21. (New) A method for producing seed of a transformed plant comprising the steps of:
 - (a) propagating the transformed plant produced by the method of claim 1;
 - (b) pollinating the transformed plant; and
 - (c) harvesting seed from the transformed plant.
- 22. (New) A method for transforming a plant comprising the steps of:
 - (a) contacting a meristematic tissue of the plant with a medium comprising DNA comprising a transgene and a plasmid vector having a T-DNA region and border sequences;
 - (b) contacting an area of the plant below the meristematic tissue of step (a) with a positive lead of a power source;
 - (c) contacting the medium comprising DNA with a negative lead of the power source; and
 - (d) applying a low amperage current from the power source, thereby causing the DNA to migrate from the medium to the cells of the meristematic tissue of the plant.

Appl. No. 09/206,852

- 23. (New) The method of claim 1 wherein the plasmid vector contains the transgene.
- 24. (New) The method of claim 22 wherein the plasmid vector contains the transgene.